

Claims

1. A protein chip detecting system for parallel detection of multiple indices, comprising

- 5 a protein chip for parallel detection of multiple indices,
 a mixed solution of two or more proteins prepared in a particular ratio of concentrations and bearing luminescent labels, i.e., reactive solution,
 a series of mixed solutions of proteins to be detected at known and increasing concentrations, i.e. standard samples solutions, and
10 a solution for rinsing protein chips,
 wherein the formulae of said standard sample solutions are as follows: 40%-60% fetal bovine serum, various highly concentrated purified antigens, and 0.02-0.1% NaN₃, or
 pH 7.0-7.8 0.05M PB (KH₂PO₄-Na₂HPO₄), 2-30% BSA, 1.5-2.5% sucrose,
15 0.02-0.1% NaN₃ and various highly concentrated purified antigens.

2. A method for preparing the protein chip detecting system as described in claim 1, wherein the protein chip is obtained by the following steps:

- 20 1) various proteins to be detected (briefly called target protein A) and antigens, antibodies or receptors and the like specific for A (briefly called B), such as endogenous disease-marker proteins and proteins that can specifically bind to them, are determined;
- 25 2) B as described above, i.e. various protein probes are dissolved in a coating solution in particular concentration, and then are spotted onto the solid phase support by automated chip spotting system, wherein the spotting density is 25-200 spots/cm² and the spotting amount is 0.1-10ng/spot;
- 30 3) the resulting product is placed overnight at 4°C;
 4) the protein chip is blocked with a blocking solution;
 5) the protein chip is dried and stored at 4°C,
 wherein the formula of said coating solution is as follows: PB (KH₂PO₄-Na₂HPO₄), pH 7.0-8.0.

- 35 3. A method for preparing the protein chip detecting system as described in claim 2, wherein the formula of said blocking solution is PB (KH₂PO₄-Na₂HPO₄) containing 1-9% BSA, 1-9% sucrose and 0.01-1% NaN₃.